Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

1. (Previously Presented) A method of receiving a communications signal to produce two output signals in quadrature relation to one another, comprising:

deriving two reference signals from a single clock signal using an adjustable dual delay line;

using the two reference signals, performing frequency downconversion of the communications signal to produce the two output signals;

forming an error signal representing the expectation of the product of the two output signals; and

using the error signal to adjust said dual delay line in order to alter a relative delay between the two reference signals.

2. (Canceled).

3. (Canceled).

4. (Previously Presented) The method of Claim 1, wherein the dual delay line is adjusted at the time of manufacture.

5. (Previously Presented) The method of Claim 1, wherein the dual delay line is automatically adjusted during operation.

6. (Previously Presented) A receiver for receiving a communications signal to produce two output signals in quadrature relation to one another, comprising:

a local oscillator;

an adjustable phase shift network having a dual delay line for deriving two reference signals from the local oscillator;

means for, using the two reference signals, performing frequency downconversion of the communications signal to produce the two output signals; and

a phase error detection network for forming an error signal representing the expectation of the product of the two output signals,

wherein said dual delay line of said adjustable phase shift network is operable to respond to said error signal and adjust a relative delay between the two reference signals.

7. (Original) The apparatus of Claim 6, wherein the phase error detection network comprises a multiplier for multiplying the two output signals to form a product signal.

8. (Original) The apparatus of Claim 7, wherein the phase error detection network comprises a low-pass filter for filtering the product signal to thereby produce the error signal.

9. (Canceled).

10. (Canceled).

11. (Original) The apparatus of Claim 6, wherein the means for performing frequency downconversion comprises Gilbert-cell mixers.

12. (Original) The apparatus of Claim 6, wherein the means for performing frequency downconversion comprises switch-mode mixers.

13. (Original) The apparatus of Claim 12, wherein the frequency of the local oscillator is a sub-harmonic of a frequency of the communications signal.

14. (Withdrawn).

15. (Previously Presented) An apparatus, comprising:

a phase error detection network configured to receive in-phase (I) and quadrature-phase (Q) signals, said phase error detection network including:

an error signal generator; and

a dual delay line configured to receive a local oscillator signal that is configured to receive an error signal from the error signal generator and generate I

and Q reference signals having a relative delay that is dependent on the error signal.

16. (Previously Presented) The apparatus of Claim 15, further comprising a downconverter configured to receive a signal to be downconverted and having reference signal inputs configured to receive the I and Q reference signals.

17. (Previously Presented) The apparatus of Claim 16 wherein the downconverter comprises I and Q mixers.

18. (Previously Presented) The apparatus of Claim 15, further comprising:

a switch driver configured to receive the I and Q reference signals and generate drive signals; and

I and Q switches configured to receive I and Q drive signals from said switch driver.

19. (Previously Presented) The apparatus of Claim 18 wherein a frequency of the local oscillator signal is a sub-harmonic of a frequency of the signal to be downconverted.

20. (New) A method of quadrature aligning in-phase and quadrature components of a communications signal, comprising:

mixing an in-phase (I) component of a communications signal received at an RF input port of an I-channel mixer with an in-phase reference signal received at a reference input of said I-channel mixer;

mixing a quadrature (Q) component of said communications signal received at an RF input of a Q-channel mixer with a quadrature reference signal received at a reference input of said Q-channel mixer;

generating an error signal from I-channel and Q-channel outputs of said I-channel and Q-channel mixers; and

based on a value of the generated error signal, adjusting a dual delay line so that a relative delay between said in-phase and quadrature reference signals results in quadrature alignment of said in-phase and quadrature components of said communications signal.